35

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Ala Ala Asp Phe Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser
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Thr Ala Val Tyr Tyr Cys Ala Lys Tyr Pro His Tyr Tyr Gly Ser 95 \hspace{1.5cm} 100 \hspace{1.5cm} 105
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Val Ser Ser
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The invention claimed is:

- 1. A method of purifying a protein which comprises a $C_H 2/C_H 3$ region, comprising subjecting a composition comprising said protein to protein A affinity chromatography at a temperature in the range from about 10 ° C. to about 18 ° C.
- 2. The method of claim 1 further comprising exposing the composition subjected to protein A affinity chromatography to a protease inhibitor.
- 3. The method of claim 2 wherein the protease inhibitor is EDTA or 4-(2-aminoethyl)-benzenesulfonyl-fluoride, hydrochloride (AEBSF).
- **4**. The method of claim **2** comprising adjusting the pH of the composition prior to protein A affinity chromatography to 55 a pH in the range from about 2.5 to about 3.5.
- 5. The method of claim 1 wherein the protein is an antibody.
- 6. The method of claim 5 wherein the antibody binds an antigen selected from the group consisting of HER2, vascular endothelial growth factor (VEGF), IgE, CD20, CD40, CD11a, tissue factor (TF), prostate stem cell antigen (PSCA), interleukin-8(IL-8), epidermal growth factor receptor (EGFR), HER3, HER4, α 4 β 7 and α 5 β 3.
- 7. The method of claim 5 wherein the antibody is selected 65 from the group consisting of Trastuzumab, humanized 2C4, humanized CD11a antibody, and humanized VEGF antibody.

- $\pmb{8}$. The method of claim $\pmb{5}$ wherein the antibody binds HER2antigen.
- **9**. The method of claim **8** wherein the antibody is Trastuzumab or humanized 2C4.
- 10. The method of claim 1 wherein the protein is an immunoadhesin.
- 11. The method of claim 10 wherein the immunoadhesin is a TNF receptor immunoadhesin.
- 12. A method of purifying a protein which comprises a $C_H 2/C_H 3$ region comprising:
 - a. subjecting a composition comprising said protein to protein A affinity chromatography to provide a recovered composition and measuring leached protein A in said recovered composition;
 - b. if greater than about 20 ng protein A per mg of said protein is measured in said recovered composition, then performing subsequent purification of compositions comprising said protein by protein A affinity chromatography at a temperature in the range from about 10° C. to about 18° C., such that protein A leaching is reduced; and
 - c. exposing the composition subjected to protein A affinity chromatography to a protease inhibitor in order to reduce the protease activity and further reduce leaching of protein A.

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